



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,267	11/25/2003	Paul Joseph O'Dea	137991 (553-1063US)	8624
45436	7590	09/03/2010		
DEAN D. SMALL THE SMALL PATENT LAW GROUP LLP 225 S. MERAMEC, STE. 725T ST. LOUIS, MO 63105			EXAMINER COBANOGLU, DILEK B	
			ART UNIT	PAPER NUMBER
			3626	
			NOTIFICATION DATE	DELIVERY MODE
			09/03/2010	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Docket@splglaw.com

Office Action Summary	Application No. 10/722,267	Applicant(s) O'DEA ET AL.	
	Examiner DILEK B. COBANOGLU	Art Unit 3626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 July 2010.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 and 4-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 4-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 07/01/2010 has been entered.

Status of Claims

2. Claims 2-3 have been canceled.
3. Claim 25 is newly added.
4. Claims 1, 4-25 remain pending in this application.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 4-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over McMorrow et al. (hereinafter McMorrow) (U.S. Patent No. 6,569,097 B1) in view of Kim et al. (hereinafter Kim) (U.S. Patent No. 5,492,125).

A. Claim 1 has been amended now to recite a method for managing ultrasound examination information, the method comprising:

Art Unit: 3626

- i. determining a completion of at least one ultrasound scan performed during an ultrasound examination (McMorrow; col. 3, lines 1-45, col. 5, line 51 to col. 6, line 3, col. 7, lines 27-40);
- ii. providing electronic notification of completion of the at least one ultrasound scan (McMorrow; col. 3, lines 1-45, col. 5, line 51 to col. 6, line 3, col. 7, lines 27-40) with a completion signal; and
- iii. generating separate outputs based upon the electronic notification (McMorrow; col. 9, lines 6-52), where the outputs comprise billing statements that are automatically generated based upon one or more criteria including a type of scan, a doctor ordering the ultrasound scan and an insurance company to be billed for the ultrasound scan (McMorrow; col. 9, lines 6-52).

McMorrow fails to expressly teach a completion signal, per se, since it appears that McMorrow is more directed to "...After the results are made available to the user, both the identification number of the examination and the ID of the particular electronic instrument used are sent to the customer relationship management (CRM) accounting server, as shown at block 92." However, this feature is well known in the art, as evidenced by Kim.

In particular, Kim discloses a completion signal (Kim; col. 8, lines 44-46 and in claims).

It would have been obvious to one having ordinary skill in the art at the time of the invention to include the aforementioned limitation as disclosed by Kim with the motivation of to retrieve the frame for processing (Kim; col. 8, lines 44-46).

B. As per claim 4, McMorrow teaches a method in accordance with claim 2 wherein the generating is provided automatically upon the completion of the at least one scan (McMorrow; col. 9, lines 6-52).

C. As per claim 5, McMorrow teaches a method in accordance with claim 1 wherein at least one of the ultrasound scans comprises an unscheduled scan (McMorrow; col. 3, lines 1-45).

D. As per claim 6, McMorrow teaches a method in accordance with claim 1 wherein the electronic notification is provided automatically upon completion of a scan (McMorrow; col. 5, line 51 to col. 6, line 3).

E. As per claim 7, McMorrow teaches a method in accordance with claim 1 wherein the electronic notification is provided based upon a user input (McMorrow; col. 5, line 51 to col. 6, line 3).

F. As per claim 8, McMorrow teaches a method in accordance with claim 1 further comprising associating completed ultrasound scans with patient information (McMorrow; col. 7, lines 27-40).

G. As per claim 9, McMorrow teaches a method in accordance with claim 1 further comprising communicating the completion signal to a remote system and

wherein ultrasound data from the ultrasound scan is not communicated to the remote system (McMorrow; col. 9, lines 6-52). McMorrow teaches “After the results are made available to the user, both the identification number of the examination and the ID of the particular electronic instrument used are sent to the customer relationship management (CRM) accounting server, as shown at block 92. The CRM server then creates a billing...” in col. 9, lines 28-37.

The obviousness of modifying the teaching of McMorrow to include communicating the completion signal to a remote system (as taught by Kim) is as addressed above in the rejection of claim 1 and incorporated herein.

H. As per claim 10, McMorrow teaches a method in accordance with claim 1 wherein at least one of the ultrasound scans is scheduled and further comprising obtaining ultrasound examination information relating to the at least one scheduled ultrasound scan (McMorrow; col. 3, lines 1-45).

I. As per claim 11, McMorrow teaches a method in accordance with claim 10 further comprising searching a patient database for the ultrasound examination information (McMorrow; col. 3, lines 1-45).

J. As per claim 12, McMorrow teaches a method in accordance with claim 1 wherein at least one of the ultrasound scans is unscheduled and further comprising updating ultrasound examination information relating to the at least one unscheduled ultrasound scan (McMorrow; col. 3, lines 1-45).

Art Unit: 3626

K. As per claim 13, McMorrow teaches a method in accordance with claim 1 further comprising immediately generating an output at a remote system (McMorrow; col. 9, lines 49-52) upon receiving the completion signal. McMorrow teaches "...the billing is automatically tallied and provided both to the user and/or to the insurance company, as appropriate." In col. 9, lines 49-52.

The obviousness of modifying the teaching of McMorrow to include a completion signal (as taught by Kim) is as addressed above in the rejection of claim 1 and incorporated herein.

L. Claim 14 has been amended now to recite a method for managing ultrasound examination information, the method comprising:

- i. searching a database for ultrasound examination information based upon a user input, the ultrasound examination information relating to one or more ultrasound scans to be performed during an ultrasound examination (McMorrow; col. 3, lines 1-45); and
- ii. generating an output based upon 9i) a notification of an update or change to a scheduled ultrasound scan to be performed as part of the one or more ultrasound scans and (ii) a received completion signal that at least one of the one or more ultrasound scans is complete, the output corresponding to the ultrasound examination information and the update or change notification, and provided remote from an ultrasound system used to perform the ultrasound examination (McMorrow; col. 3, lines 2-45, col. 4, lines 48-67, col. 5, line 34 to col. 6, line 31).

Art Unit: 3626

The obviousness of modifying the teaching of McMorrow to include communicating a completion signal to a remote system (as taught by Kim) is as addressed above in the rejection of claim 1 and incorporated herein.

M. As per claim 15, McMorrow teaches a method in accordance with claim 14 wherein the output comprises at least one billing statement (McMorrow; col. 9, lines 6-52).

N. As per claim 16, McMorrow teaches a method in accordance with claim 14 wherein a separate output is generated in connection with each electronic notification (McMorrow; col. 5, line 34 to col. 6, line 31).

O. As per claim 17, McMorrow teaches a method in accordance with claim 14 further comprising configuring the output based upon predefined criteria (McMorrow; col. 5, line 34 to col. 6, line 31).

P. As per claim 18, McMorrow teaches a method in accordance with claim 14 wherein the electronic notification is generated based upon a user input (McMorrow; col. 5, line 34 to col. 6, line 31).

Q. As per claim 19, McMorrow teaches a method in accordance with claim 14 wherein the electronic notification is automatically generated upon completion of an ultrasound scan (McMorrow; col. 5, line 34 to col. 6, line 31, col. 7, lines 27-40).

R. As per claim 20, McMorrow teaches a method in accordance with claim 14 wherein the completion signal is received by an administrative system and further

Art Unit: 3626

comprising immediately generating a billing statement from the administrative system upon receiving the completion signal.

McMorrow teaches "After the results are made available to the user, both the identification number of the examination and the ID of the particular electronic instrument used are sent to the customer relationship management (CRM) accounting server,...the billing is automatically tallied and provided both to the user and/or to the insurance company, as appropriate." In col. 9, lines 28-52.

The obviousness of modifying the teaching of McMorrow to include a completion signal (as taught by Kim) is as addressed above in the rejection of claim 1 and incorporated herein.

S. Claim 21 has been amended now to recite a user interface for an ultrasound system comprising:

- i. a control portion for controlling operation of an ultrasound system (McMorrow; col. 3, lines 1-45, col. 5, line 34 to col. 6, line 31); and
- ii. a menu portion for receiving a user input indicating the completion of at least one ultrasound scan, a completion signal transmitted based upon the user input and used by a remote system for generating an output based upon ultrasound examination information, wherein the output comprises a billing statement related to the completed ultrasound scan and at least one of a hospital report, a patient scheduling list, a technician

Art Unit: 3626

scheduling list or a technician time sheet (McMorrow; col. 3, lines 1-45, col. 5, line 34 to col. 6, line 31, col. 8, lines 25-36).

The obviousness of modifying the teaching of McMorrow to include a transmitting a completion signal (as taught by Kim) is as addressed above in the rejection of claim 1 and incorporated herein.

T. As per claim 22, McMorrow teaches a user interface in accordance with claim 21 wherein the menu portion is configured to allow for selection of a plurality of user screens, at least one of the screens providing fields for searching the ultrasound examination information (McMorrow; col. 7, lines 7-20).

U. As per claim 23, McMorrow teaches a method in accordance with claim 1 further comprising providing electronic notification of at least one of an update and change to the at least one ultrasound scan (McMorrow; col. 8, lines 38-51).

V. As per newly added claim 25, McMorrow teaches a method in accordance with claim 14 wherein the output comprises at least one of a hospital report, a patient scheduling list, a technician scheduling list or a technician time sheet (McMorrow; col. 25-36).

7. Claim 24 is rejected under 35 U.S.C. 103(a) as being unpatentable over McMorrow et al. (hereinafter McMorrow) (U.S. Patent No. 6,569,097 B1) in view of Examiner's Official Notice.

A. Claim 24 recites a method in accordance with claim 1 further comprising providing electronic notification after an expiration of a predetermined time period for the at least one ultrasound scan.

Art Unit: 3626

McMorrow does not explicitly disclose providing electronic notification after an expiration of a predetermined time period for the at least one ultrasound scan, per se McMorrow teaches electronic notification of completion of a scan (McMorrow; col. 3, lines 1-45, col. 5, line 34 to col. 6, line 31 and col. 7, lines 27-40).

However, the Examiner takes official notice that it was well known in the electronic medical recording arts to provide a notification when a predetermined time period expires for a certain work. The motivation would have been to alert the medical providers.

Response to Arguments

8. Applicant's arguments filed 07/01/2010 have been fully considered but they are not persuasive. The Applicant's arguments will be addressed below in the order in which they appear.

A. In response to Applicant's argument about McMorrow does not teach "generating separate outputs based upon the electronic notification, where the outputs comprise billing statements that are automatically generated based upon one or more criteria including a type of scan, a doctor ordering the ultrasound scan and an insurance company to be billed for the ultrasound scan" (Remarks, page 1, par. 3-4); Examiner respectfully submits that McMorrow teaches "...develop appropriate billing for the patient's insurance provider, saving time and expense for the insurer" in col. 9, lines 6-8, and "The overall business billing system includes coordination between the analysis and transmission of the

Art Unit: 3626

ultrasound data and the determination of the status of the user's account. If the user's account is current, then the billing is automatically tallied and provided both to the user and/or to the insurance company, as appropriate." In col. 9, lines 47-52. Examiner would like to submit that a broad, yet reasonable interpretation of McMorrow with the knowledge available in the skilled artisan, the billing for the patient's insurance provider would include one or more criteria including type of scan (what is the billing for, the job description), a doctor ordering the ultrasound scan (referral, why is the ultrasound necessary, who orders the scan), and the information about the insurance company (the bill is provided to the insurer, therefore the information about the insurer must be in the billing). Examiner also notes that the claim recites "one or more criteria", therefore the reference does not have to teach all of the criteria.

B. In response to Applicant's argument about McMorrow does not teach "a notification of an update or change to a scheduled ultrasound scan to be performed" (Remarks, page 1, par. 5 to page 2, par. 2); moreover, Applicant states that McMorrow teaches "indication for changes to a physical attribute of an imaged patient, and not of a change or update to a particular scan to be performed; Examiner respectfully submits that if the patient's physical attribute changed or updated, then the ultrasound to be performed would be changed and updated accordingly. McMorrow teaches "Prior to beginning the ultrasound procedure, the patient is first identified to the PDA. If the patient is not in the web database 18, information about the patient will be created in the form of a record

Art Unit: 3626

for storage in web database 18. PDA 17 will then display a list of application-specific programs is for possible use by the data collection device 12. The selected program will then control the operation of the DCD for a specific ultrasound application.” In col. 3, lines 28-35.

C. In response to Applicant’s argument about McMorow does not teach “generating any other type of reports, such as the claimed hospital report, patient scheduling list, technician scheduling list or technician time sheet”; Examiner respectfully submits that McMorow teaches “...an "exam incident" indicator can be created in database 18, which includes **the exact time and date the procedure was performed**, as well as the serial number of the device used. Database 18 will eventually be able to link the DCD instrument to a specific location and a list of possible users. When convenient, the operator will access the database, where the list of "exam incidents", connected with their facility/user name, is listed. The operator can then connect the appropriate patient to the exam.” In col. 8, lines 25-26. Therefore, the “exam incident” indicator is a hospital (clinic) report which includes date and time information.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DILEK B. COBANOGU whose telephone number is (571)272-8295. The examiner can normally be reached on 8-4:30.

Art Unit: 3626

10. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert Morgan can be reached on 571-272-6773. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dilek B Cobanoglu/
Examiner, Art Unit 3626